## catoolRT 17.12 Release Notes

## Changes since 17.9:

- Update analysis rate in "Advanced DAQ config" to reflect 2/4 stroke engine
- Add DAQ monitoring option (default off)
  - Used with test bed automation to provide safe unattended operation
- Added time based recording of start
  - o Also allows time based diagnostic of clock/trigger signals
- CAN signals are now unpacked as 64-bit floating point numbers
- Added support for alarms
- File open/save uses later Windows dialog
- Support trigger wheels with three missing teeth
- Allow export of custom engine volumes from "Edit Engine"
- Better handle detection of newly inserted NI hardware
- Save engine database at "Save All"
- Change some menu item names to help avoid confusion
  - o "Open..." becomes "Open Data..."
  - o "Save" becomes "Save Data"
  - o "Save As" becomes "Save Data As..."
  - "Save DAQ Info" becomes "Export DAQ Debug Log"
- At the end of a recording the dialog box and button are renamed
  - o "OK" becomes "Save"
  - "Configure File" becomes "Save Recording"
- Added some additional robustness to acquiring data where the missing tooth has been lost
- Fixed an issue with wrong engine speed for 2-stroke engines
- Fixed an issue with DAQ starting at wrong segment due to TDC phase error
- Speed improvements plotting data sets with a large number of data points, i.e. time based data
- Speed improvements plotting data sets with points outside of visible window
- Added some missing text to translation files
- Moved some icons/text to allow for Spanish/German translations
- In "Edit Channel" the channel types are now in alphabetical order
- In "Configure DAQ" the "Reset" options is now called "Import"
- Saving data is now always in AVL IFile format. To save as CSV or MATLAB go to "File" -> "Import and Export..."
- TDC determination, default standard deviation limit is 0.3 degrees (was 0.7)
- Check "Invert Colours" as necessary with no open windows
- Warn user that recording data in non-AVL IFile format cannot be easily reloaded